# THE GENUS OBRIUM (COL., CERAMBYCIDAE) IN GREAT BRITAIN: A RE-APPRAISAL

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Three species of Obrium are recorded from central Europe (Freude, 1966), of which the third, Obrium bicolor Kraatz, does not occur in this country, being confined to the southern parts of the Continent, Lower Austria and Czechoslovakia. The remaining two species, Obrium cantharinum L. and Obrium brunneum F., have been found with very few exceptions in areas limited either to what are nowadays the suburbs of northern Outer London, in the case of O, cantharinum, or to a few counties south of the Thames in that of O. brunneum.

Excluding Broxbourne, Herts., (Davis, 1833), which lies almost on the borders of the adjacent county of Essex, some 20 kilometres from, and on the perimeter of a circle having Wanstead as its centre; Great Coggleshall, well to the north-east of the latter county; a Kentish locality, teste Mr. A. A. Allen, where it was apparently found in some numbers by the late Professor Theobald; East Sussex, five repetitive records (Stephens, 1831, 1839; Janson, 1863; Fowler, 1890, 1905); and a solitary specimen from Devonshire (Perkins, 1929), O. cantharinum has only been taken in a fairly circumscribed region north of the Thames. That area embraces such famous collecting grounds as the Epping and Hainault Forests, besides some tracts of ancient woods, formerly the parklands of private estates: of these, for example, Wanstead Park is one and Dagnam Priory another. It is from the Essex localities, Wanstead House in particular, that numbers of O, cantharinum were once found in some quantity - and, it is suspected, not a few of these specimens, imagines and bred-out larvae, later turned up in the stock of entomological suppliers, to be sold to Coleopterists interested in the acquisition of what is one of our rarest Longicorns: so rare indeed, that it has not recurred in this country for something like sixty years.

Assuming that our oldest records of O. cantharinum (Curtis, 1825; Stephens, 1831; Davis, 1833) are correctly attributed to this species and not confounded with O. brunneum - an easily perpetrated mis-identification - for the latter was unrecorded in Great Britain until the 1930s, witness one specimen in the E. C. Bedwell collection, Castle Museum, Norwich, standing under the label of O. cantharinum, placed alongside a genuine example, sine data, of the latter; it is in fact our other species, O. brunneum, captured by Cox near Pulborough (Harwood and Cox, 1939), the details of which have been kindly confirmed by Dr. A. G. Irwin of the

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Castle Museum in litt.: this requires the deletion of West Sussex from the distributional lists (Kaufmann, 1948).

There is evidence to suggest that some dubiety exists over the correct determination of the two British species; O. cantharinum is regarded as a very scarce European beetle, associated with deciduous growths (which include presumably fruit trees, such as the apple), Rosa canina and willows; O. brunneum, on the other hand, is given as the commonest of the three beetles, exclusive to coni-

ferous trees, especially pines and firs (Freude, 1966).

Although O. cantharinum has been so very infrequently found in this country ["England, South of Herts.; very rare;" (Joy, 1932)], there is the possibility that it may still occur in one or other of the old copses and woods containing broad-leaved and wild fruit trees north of the London area; it should certainly not be written off as extinct; there are parallel instances, such as Strangalia revestita L., once regarded as a doubtfully indigenous insect (Kaufmann, 19462); and the highly localised Molorchus umbellatarum Schreber vis-à-vis M. minor L. (Kaufmann, 1947). In the state of our present knowledge O. cantharinum is so scarce that it is, perhaps like Judolia sexmaculata L. was, successfully eluding the collector.

Earlier evidence suggests — if it is not extinct — that O. cantharinum may yet occur in very restricted places in Essex. It is felt that the singleton from Bovey Tracy sent to and correctly validated by T. H. Edmonds (Perkins, 1929) is exceptional and insufficient a guide to its turning up again so far westwards, whereas O. brumeum is slowly extending its limits through our southern counties (Kauf-

mann, 1947).

There is a wide diversity in the specific descriptions given in the texts consulted (Curtis, 1825) via (Fowler, 1890) to the later 20th century authors (Joy, 1932; Duffy, 1952) for O. cantharinum, and particularly the more recent works (Freude, 1966; Harde, 1984) for O. brumeum. The two species are referred to (Linssen, 1959), but only O. cantharinum is described and figured. E. W. Janson, 1863, British Beetles, characterises and delineates O. cantharinum: plate XXVII, figure 240, drawn by J. Curtis, is unquestionably that species.

O. cantharinum and O. brunneum must be seen side-by-side so as to make a correct determination: it is not the good fortune of every private collection that contains either insect, let alone ex-

emplars of both.

There is a useful little dichotomous table (Harwood and Cox, 1936) separating the two species, but the feature which really distinguishes cantharinum from brunneum — size and colour are unreliable characters — lies in the breadth of the space between the lower half of the reniform eyes as seen from above; the distinction is clearly shown in the figures accompanying Freude's 1966 text. Harwood and Cox use a different eye-gauge in their tabulation; this could still lead to some confusion.

What has been implied in the paragraph *supra* is summarised in a fresh table of comparison based upon descriptions given by nine different authors, covering the early 19th century to 1984. The summary is as follows:—

## Obrium cantharinum L. Obrium brunneum F.

Eyes: Black. : Black.

Space between eyes smaller than vertical broad as, or broader in  $^{\circ}$  eye-length.

Colour: Orange-red, terra cotta : Yellow-brown to dark

or dark brown. brown.

Legs & rusty-brown to blackish; : Lighter brown.

Antennae: (4, legs black).

Thorax: Disc shinier, lightly : Disc dull, distinctly

punctured. punctured.

Elytra: Clearly and thickly, : Heavily and more regularly

if irregularly punctured than punctured; more so the thorax.

*Length*: 5 - 11 mm. 4 - 7 mm.

Mean length: 7.96 mm. Mean length: 5.37 mm.

Iarger than d.

Generally larger than : Generally smaller than O. brunneum. O. cantharinum.

Habitat: Deciduous trees. : Coniferous trees.

O. cantharinum is a very rare insect which was formerly common in one or two places; O. brunneum is a local beetle of which a few rather than multiple examples have been taken at any one time.

"...this pretty species ..." (Stephens, 1831); "A very graceful and pretty species ..." (Fowler, 1890): these two remarks, the one echoing the other, refer to *O. cantharinum*; they cannot in all truth be said of *O. brunneum*, which, apart from its long antennae, is a duller-looking Longicorn resembling superficially, say, *Gracilia minuta* F., in colour and appearance. Nevertheless, can it be that some if not all the specimens collected south of the Thames (Stephens, 1831, 1839; Fowler, 1890, 1905) were thought to be *O. cantharinum*, *O. brunneum* not having been 'discovered' until this

century (Harwood and Cox, 1936)? Mr. Allen in a letter expresses the view that this would have been a natural enough error. It does not explain, however, why an example of brunneum (taken by Cox) should have been placed, presumably by Bedwell himself, alongside a genuine cantharinum in the same collection and under the same label of *Obrium cantharinum*. There is an important proviso: quite a number of Bedwell's specimens have been re-mounted in recent years and "arranged in cabinets". [See Darby, M., A biographical Dictionary of British Coleopterists: page 43, (Cyclostyled Sheets, n.d., ca. 1984.)]. Such a re-arrangement may have led, understandably enough in the circumstances, to an error in the placement of Cox's brunneum specimen, juxtaposed to the Bedwell example of the real O. cantharinum. The mistake is further compounded by the presence in Bedwell's collection of two specimens taken by Cox, conspecific with brunneum, and correctly labelled as such.

Details about the distribution of our two *Obrium* species were published nearly forty years ago (Kaufmann, 1947, 1948); since these may not readily come to hand they are repeated here, together with the somewhat meagre fresh data that have since been garnered.

It remains to add a word about habitat: *O. cantharinum* has been recorded from crab apple trees, aspen and poplar; it may be associated with either oak or birch — this seems a little unclear (Perkins, 1929). There are no British data listing it from rose or willow trees. As with *O. bicolor*, it has not been found on conifers of any sort.

O. brunneum, on the other hand, inhabits the twigs and dead branches of pine, various firs, spruce and the (deciduous) larch (Saunders, 1939; Kaufmann, 1947; Allen, 1955; Harde, 1984). It may also be swept from Umbellifers and flowering hawthorn, particularly if these are growing near the evergreens mentioned (Harwood and Cox, 1936; Kaufmann, 1947; Harde, 1984).

Months of capture are usually June — July for *Obrium cantha-rinum* and May — August for *O. brunneum*.

The latter species is at its commonest in the afforested mountain areas of central Europe (Harde, 1984); that hardly applies to this country.

#### Obrium cantharinum L.

"In the Cabinets of Mr. Sparshall and the Author." (Curtis, 1825). Curtis (op. cit.) adds that J. Sparshall informed him "that a male and female of our insect were taken by Mr. Henry Doubleday in a garden . . .", infra North Essex. The Curtis collection is now in the National Museum, Melbourne, Australia. There are three specimens, all without data labels, in the J. F. Stephens collection, British Museum (Natural History) — (BMNH). There are several data-less examples in BMNH, such as one collected by Weaver, purchased

in Rannoch; two *in coll*. Sharp, bought from Desvignes; one, taken by Dr. J. A. Power *in coll*. T. Wood; one *in coll*. Power, *ex. coll*. Pascoe; and half-a-dozen specimens, all unprovenanced.

EAST and/or WEST KENT (?): Prior to or shortly after the Great War 'freely in a Kentish orchard' according to information supplied by Professor Theobald to the late Dr. A. M. Massee (Mr. Allen *in litt.*); East Kent is only quoted briefly (Kaufmann, 1948), based on a detail given by Dr. Massee.

EAST SUSSEX: Near Brighton, taken by Mr. Raddon (Stephens, 1831, 1839; Janson, 1863; Fowler, 1890, 1905; Kaufmann, 1947, 1948). Hastings (F. W. Hope), 1Spp. Hope Dept. Ent.

HERTFORDSHIRE: "... Several pairs of this extremely rare insect have been recently taken at Broxbourne, Herts, by Mr. Bond, a diligent collector. Having met with one or two flying in an outhouse, he was induced to examine the building, when he discovered, from some holes in the rafters, that they were, in all probability, bred in the timber. On further examination, he found that the rafters were made either of the common poplar or the aspen, and, as is frequently the case in country buildings, had been used without stripping off the bark. On removing the bark, he procured several more of the perfect insect and one larva. I have a piece of the bark which shows the path of the larva and the place of exit of the imago. The outhouse has been erected about eighteen months, and the timber had been purchased from the park of J. Bosanquet, Esq." (Davis, 1833). The above record is reproduced in full as the first volume of the periodical in which it appeared is a scarce bookcollector's item. Broxbourne (Stephens, 1839; Janson, 1863; Fowler, 1890; Elliman, 1902; Joy, 1932; Kaufmann, 1947, 1948). A Coleopterist's Handbook, 1975, 2nd ed., revised by Cooter, J. and Cribb, P. W., states on page 93 that Obrium cantharinum occurs in Populus, "in wood and under bark of aspen". note on the pabulum is no doubt taken from the earlier authors' references.

NORTH ESSEX: Great Coggleshall, a  $\sigma$  and a  $\Omega$  taken by H. Doubleday in a garden, 15.VII.1823, off apple tree leaves; another  $\sigma$  "close to the same tree", 10.VIII.1824, on a nearby plant (Curtis, 1825; Kaufmann, 1947, 1948). Both sexes, resting on a twig of flowering *Pyrus malus (Malus sylvestris)* are illustrated in Curtis.

SOUTH DEVON: Bovey Tracy, a singleton, summer 1929, emerged from a decayed birch stump picked up in a nearby lane and taken home in 1928 (Perkins, 1929), now *in coll*. BMNH.

SOUTH ESSEX: a 9, VII, 1824, found by Blunt on aspen bark near Wanstead House. (Curtis, 1825; Stephens, 1831, 1839; Fowler, 1890: Harwood, 1903: Kaufmann, 1947, 1948); Wanstead, one, bred from bark, 1860 (Power) in coll. G. C. Champion; five examples from bark, VI.1861 (Power); one specimen "collected for 3rd year from aspen bark" (Power); six beetles collected by E. H. Robertson. All these specimens are in the BMNH collections (Fowler, 1890; Donisthorpe, 1898; Harwood, 1903; Walker, 1932; Kaufmann, 1947, 1948); a of from the same locality, caught by E. H. Robertson, ex. coll. W. Janson (Kaufmann, 19461), now in coll. Uhthoff-Kaufmann, Manchester University Museum; Mr. Allen also has a Wanstead cantharinum from the same source, similar data; Leytonstone, no details (Stephens, 1839; Fowler, 1890; Harwood, 1903); near Epping, taken by Doubleday, "two of them on an apple-tree. . . and a third by . . . Mr. Blunt." (Stephens, 1831, 1839; Fowler, 1890; Harwood, 1903). It is suggested that the Stephensian records - later repeated - are mistaken and that they really refer to Curtis' original ones from north Essex. Epping, Levtonstone and Wanstead all lie close to what remains of Epping Forest which, last century, must have spread over a much wider region.

WEST SUSSEX: The Pulborough record is erroneous (Kaufmann, 1947, 1948) and should be expunged.

#### Obrium brunneum F.

DORSET: Wimborne, a single beetle beaten from hawthorn flowers by P. Harwood, 27.V.1936 (Harwood and Cox, 1936; Kaufmann, 1946<sup>2</sup>, 1948); some further examples in August, 1939, close to the same vicinity (Harwood and Cox, 1939); Witchampton, two specimens captured by Dr. A. M. Massee in June, 1936 (Kaufmann, 1946<sup>2</sup>); 11.VI.1939, captor Massee, *in coll*. BMNH; also in this locality, *ca.* 1951-52, found by P. Harwood; Badbury Rings, same period and collector.

EAST KENT: Ham Street Woods, singly off spruce, 15.VI.1963 and 11.VI.1964 (A.A.Allan), first discovered there by Dr. Massee; 11.VI.1963 (Massee) *in coll*. BMNH.

EAST SUSSEX: Laughton, beaten off oak growing near Scots firs, 1.VII.1939, one example (Saunders, 1939; Harwood and Cox, 1946; Kaufmann, 1947, 1948).

SOUTH HANTS.: New Forest, a pair on a pine log, July or August, 1954, found by A. M. Robertson (Allen, 1955); a singleton, captor D. Appleton, 1974.

SURREY: Dunsfold, taken by Professor J. A. Owen in June, 1982, by beating the dead lower branches of spruce. This is a very modern record confirming the continuing spread through the southern counties of the species.

WEST SUSSEX: Near Storrington (=Parham Park), one swept in the neighbourhood of pines, 1.VI.1936, by L. G. Cox (Harwood and Cox, 1936; Kaufmann, 1946<sup>2</sup>, 1947, 1948); Parham Park, on May blossom, 5.VI.1951 (Cox), A. M. Massee collection *in coll*. BMNH.; Pulborough (=Parham Park), in small numbers close to the original locality (Harwood and Cox, 1939), including a  $\sigma$ , dated 1.VI.1939, found by Cox, now *in coll*. Bedwell, Norwich; two further specimens captured by Cox in Parham Park, 5.VI.1939, also in the Bedwell collection; several taken from the Park by Cox on July 1st, 1939 (Saunders, 1939).

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DEILEPHILA ELPENOR L. (ELEPHANT HAWK-MOTH) IN S. DEVON further to B. K. West's aricle on elpenor (Ent. Rec. 97: 113-117), my records for this species go back about 20 years. It is the commonest hawk-moth in my m.v. trap, followed by Sphinx ligustri and Laothoe populi in about equal numbers. Warm weather in late May sometimes produces single specimens, but June and July are best, with none being recorded after the first week in August. During July 1983, 85 moths were recorded, with 13 the best catch on one night.

The larvae are commonly found on fuchsia (Fuchsia magellanica) and the moths like honeysuckle. A few years ago, on 31st May 1 obtained a few eggs from a dying moth, accidentally killed by insecticide. Two hatched on the same day and throughout their lives had identical instar periods; both pupated on the same day in the same container. One emerged in September, the other the following June. H. K. O'HEFFERNAN, 24 Green Park Way, Chilling-

ton, Kingsbridge, Devon TQ7 2HY.